NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Applicant: 7-Eleven, Inc.

P.O. Box 711

Dallas, TX 75221-0711

Permit Number: NV0024074

Location: 7-Eleven Store #29643

15 North Lamb Blvd.

Las Vegas, Clark County, NV 89110

Latitude: 36° 09' 33" N, Longitude: 115° 04' 50" W

Section 31, T20S, R62E MDB&M

Discharge Outfall: Outfall 001: Clark County stormdrain drop inlet at E. Charleston & N.

Lamb

Latitude: 36° 09' 33.08" N Longitude: 115° 04' 49.88" W

<u>General:</u> The Applicant has applied for a new National Pollutant Discharge Elimination System (NPDES) permit, NV0024074, to discharge treated groundwater to the Las Vegas Wash via the Clark County stormdrain system.

The Applicant owns and operates a convenience store and retail fueling station at 15 North Lamb, at the intersection with East Charleston, in Las Vegas, Clark County, Nevada. The site is impacted with Total Petroleum Hydrocarbons (TPH) and Volatile Organic Compounds (VOC), specifically, Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX), and Methyl tert-butyl ether (MTBE). Four on-site pumping wells will convey flow to the treatment system. Groundwater remediation is accomplished using a Dual-Phase Extraction (DPE) System, which treats both soil vapors and impacted groundwater. The water treatment portion of the system includes a sediment filter and two aqueous phase GAC adsorption vessels in series, which remove TPH and VOCs (including BTEX, and MTBE) from the impacted groundwater. The treated water will be pumped to the nearest Clark County stormdrain system drop inlet, located at the northwest corner of Charleston and Lamb Blvd. Sampling and analysis of the pre-treatment influent (contaminated groundwater), mid-point (between carbon canisters) location, and post-treatment effluent discharge is required for TPH, VOC, MTBE and BTEX. Monitoring of the discharge is conducted to ensure that surface waters are not degraded as a result of the discharge.

<u>Flow:</u> The treatment system's maximum daily discharge will be 20 gallons per minute (gpm) and will be permitted at 0.0288 MGD.

<u>Discharge Characteristics</u>: Overall, the groundwater to be discharged is anticipated to be of good quality. Data from similar treatment systems indicates that TPH, BTEX, and MTBE will be removed below NDEP action levels prior to discharge.

<u>Receiving Water Characteristics:</u> Groundwater from the remediation system is discharged to the Clark County stormdrain system. The stormdrain system conveys the water to the Las

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Vegas Wash. Water quality standards for the beneficial uses designated in NAC 445A.198, are specified in NAC 445A.199.

<u>Proposed Discharge Limitations and Special Conditions</u>: The water discharged from the groundwater remediation system to the Clark County stormdrain system shall be limited, sampled and monitored by the Permittee as specified below.

Discharge samples and measurements taken in compliance with the monitoring requirements specified below shall be taken prior to discharge at Outfall 001 at the following locations:

- a. The sample port on the inlet line to the first carbon canister;
- b. The sample port on the discharge line from the first activated carbon vessel, prior to the second activated carbon vessel; and
- c. The sample port on the discharge line of the second carbon vessel, prior to discharge to the stormdrain drop inlet.

<u>Site Groundwater:</u> Within the project area the groundwater elevation is generally quite shallow, approximately 10-20 feet below ground surface. The local groundwater flow direction is southeast.

<u>Corrective Actions Sites:</u> There is one BCA remediation site within a one-mile radius of the facility, Zak's Mini Market, approximately one mile up-gradient of the 7-Eleven on N. Lamb Blvd. The BCA case officer does not expect the off-site remediation activities to be impacted by the proposed remediation at this site.

Well Head and Drinking Water Supply Protection: The facility is not within 6000' of a public water supply. A Wellhead Protection Area (WPA) has not been established for this area.

<u>Proposed Discharge Limits:</u> Specific sampling and monitoring requirements are listed below in Table 1.

Table 1. Discharge Limitations, Sampling and Monitoring Requirements

		Discharge Limitations		Monitoring Requirements		
Parameters	Units	30-Day	Daily	Sampling	Monitoring	Monitoring
		Average	Maximum	Locations	Frequency	Type
Discharge Rate	MGD	M&R	0.0288	a.	Continuous	Flow meter
TPH	mg/l		M&R	b.	Quarterly	Discrete
			1.0	c.		
VOC	μ g/l		M&R	c.	Annually	Discrete
MTBE	μ g /l		M&R	b.	Quarterly	Discrete
			20	c.		
Benzene	μ g/l		M&R	b.	Quarterly	Discrete
			5	c.		
Toluene	μ g/ l		M&R	b.	Quarterly	Discrete
			100	c.		
Ethylbenzene	μ g /l		M&R	b.	Quarterly	Discrete

		 100	c.		
Total Xylenes	μ g/l	 M&R	b.	Quarterly	Discrete
		 200	c.		
Carbon ¹	lbs	 M&R	Each vessel	Event	Discrete
Profile I ²	mg/l	 M&R	c.	Annually	Discrete
VOC ³	μ g/l	 M&R	c.	Annually	Discrete

Notes:

- Carbon: track activated carbon addition and advancement as it occurs and report date and mass on applicable DMR
- 2. Profile I: Report in January each year, the results of each NDEP Profile I parameter individually (metals analyses shall be total, recoverable).
- 3. Use EPA Method 8260B; report sample results from calendar year 4th quarter sampling event, all VOC parameters on January DMR each year.

Definitions:

MGD: Million gallons per day

M&R: Monitor and Report

mg/l: milligrams per liter

µg/l: micrograms per liter

TPH: Total Petroleum Hydrocarbons, full range, C6-C40, purgeable and extractable, using EPA Method 8015B.

VOC: Volatile Organic Compounds MTBE: Methyl tert-butyl ether

<u>Rationale for Permit Requirements</u>: The monitoring requirements and permit limits have been established to ensure that the Las Vegas Wash is not degraded from the discharge of treated groundwater. The requirements are consistent with similar groundwater remediation system discharge permits.

<u>Schedule of Compliance</u>: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance:

- The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit.
- By October 31, 2011, the Permittee shall submit to the Division for review and approval, an Operations and Maintenance Manual, prepared in accordance with applicable sections of WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant.
- The Permittee shall notify the Division in writing within 14 days of initiating discharge.

<u>Proposed Determination</u>: The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

<u>Procedures for Public Comment:</u> The Notice of the Division's intent to issue a new NPDES permit for a five-year period, authorizing this facility to discharge into the Las Vegas Wash via the Clark County stormdrain system, subject to the conditions contained within the permit, is being sent to the <u>Las Vegas Review-Journal</u> for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public

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notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is October 10, 2011 by 5:00 P.M.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Jeryl R. Gardner, P.E. Date: September, 2011

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